

Clinical Section

Allergic Diseases of Infancy and Childhood*

By

ALBERT V. STOESEER, M.D., Ph.D.

Associate Professor of Pediatrics

University of Minnesota, Minneapolis

Allergy, which means altered reactivity, is a term introduced by Von Pirquet and Schick¹ at the time they were studying serum sickness, a condition which exists in many individuals after receiving therapeutic serums. Doerr² later used the term to apply to all phenomena of hypersusceptibility in animals and in man, and Zinsser³ also was in favor of using the word allergy to designate this interesting field of medicine. We find, however, under the general heading, allergy, the existence of a great deal of confusion when any attempt is made to classify and correlate the various experiments with animals by numerous workers and the clinical observations of many physicians.

The terms anaphylaxis, allergy and hypersensitiveness are used interchangeably in the medical literature. An effort has therefore been made at this time after a careful survey of the reports of some of the leading observers in this field to present a classification or outline with the hope that it will be of some value in the diagnosis and possibly in the prognosis and the treatment of allergic conditions.

- I. Anaphylaxis or anaphylactic hypersensitiveness (artificially produced allergy).
 - A. In animals—experimental.
 - B. In man—anaphylactic shock in a previously sensitized individual.
 - C. Drug anaphylaxis in man.
- II. Natural or human hypersensitiveness (allergy by natural acquisition).
 - A. Serum allergy or sickness (delayed anaphylactic reaction).
 - B. Drug allergy or idiosyncrasy.
 - C. Contact dermatitis.
 - D. Contact allergic coryza (vasomotor rhinitis).
 - E. Atopy or atopic hypersensitiveness (allergy through heredity).
 1. Atopic or allergic dermatitis.
 - (a) Acute eczema (so-called "true eczema" of infancy).
 - (b) Chronic eczema (so-called "neurodermatitis" of childhood).
 2. Allergic coryza (atopic, hyperesthetic or vasomotor rhinitis) due to:
 - (a) Inhalants
 - (1) Animal emanations.
 - (2) Pollens (hay fever or pollinosis).
 - (3) Powders and perfumes.
 - (b) Foods and drugs.
 - (c) Bacterial products of infection.

III. Hypersensitiveness in infection (allergy acquired through infection).

- A. Bacterial allergy or hyperergia.
 1. Tuberculosis.
 2. Allergy has been considered in:
 - (a) Rheumatic fever.
 - (b) Scarlet fever.
 - (c) Nephritis.
 - (d) Lobar pneumonia.
- B. Fungous and parasitic infections may produce allergic reactions.

The name atopy, which means "a strange disease" was coined by Coca,⁴ a leading American investigator in the field of allergy. He included all those clinical forms of hypersensitiveness which occur so far as is known only in human beings and which are subject almost entirely to inheritance.

The substance to which the atopic individual responds in an abnormal way are called "atopens", and they may be proteins or non-proteins. These individuals react with specific bodies which may be found in the blood of nearly all cases. Whether these bodies which have been called atopic reagins are true antibodies developed immunologically under antigen stimulation or physiological products like the natural hemoagglutinins and hymolysins is not known.

The purpose of this communication is to summarize the experience which we have had during the past six years in taking care of allergic children. There were 373 cases which were distributed as follows: eczema, 115 (30.8 per cent.); allergic coryza, 46 (12.4 per cent.); hay fever, 51 (13.6 per cent.); bronchial asthma, 141 (37.8 per cent.); urticaria, 17 (4.6 per cent.); and gastro-intestinal allergy, 3 (0.8 per cent.). All of these allergic disorders may be grouped under that subheading of natural or human hypersensitiveness entitled atopy or atopic hypersensitiveness.

* From the Allergy Clinic and Service of the Department of Pediatrics, University Hospital, Minneapolis. Presented before the Winnipeg Medical Society at Winnipeg on March 18th, 1938.

The atopic children were handled in the allergy clinic in a rather simple manner. Nothing elaborate was attempted. An effort was made to follow some definite program in searching for the cause of the allergic disorder. First of all, a very complete history was obtained. It was observed that in many instances a good history was really the key to success in the treatment. Special emphasis was placed on the time of onset, the outstanding symptoms, the course of the disease from month to month, or year to year, the previous allergic disorders, the associated or concomitant allergic disorders, and the family history. A search was made for allergic disorders among immediate members of the family and blood relations. Several history outlines were tried in obtaining good records but none was found to be quite as satisfactory as the one that follows:^{5, 6}

I. PRESENT ILLNESS. Sex Age Date

- A. Duration. Date of onset.
- B. First attack: Gradual or sudden onset and early symptoms.
- C. Suspected cause of onset (illness or operation)?
- D. What brought relief?
- E. Frequency of attacks.
- F. Duration of attacks.
- G. When worse (time of year)?
- H. Seasonal only?
Dates.
- I. Chief symptoms at present time:
- J. Free from symptoms at any time?
Dates.
- K. Where living at that time?
- L. Any symptoms between attacks?
- M. Treatment received up to the present time:
- N. Success of treatment.

II. PAST HISTORY.

- A. Infancy.
 1. Infantile eczema?
Dates.
 2. Breast-fed how long?
Bottle-fed how long?
 3. Food disagreements.
Any foods cause any symptoms?
- B. Childhood (circle positive findings).
 1. Any chronic or recurrent rhinitis, bronchitis, croup, cyclic vomiting or frequent gastro-intestinal disturbances?
 2. Any eczema, allergic coryza, hay fever, asthma, urticaria, gastro-intestinal allergy, purpura?
Dates.
 3. Were these continuous?
Seasonal? When worse?
 4. Any suspected cause?
 5. Treatment received?
 6. Success of treatment.
- C. History by symptoms (record other symptoms besides those listed).
 1. Head — headache (unilateral or bilateral).
 2. Scalp—itching and seborrhea.
 3. Eyes—itching and burning.
 4. Nose—blockage, discharge, sneezing.
 5. Ears—itching.

6. Mouth and throat—irritation, dryness.
7. Chest—dyspnea, chronic cough, chronic expectoration (amount and type).
8. Heart—tachycardia.
9. Gastro-intestinal — constipation, diarrhea, abdominal distress, nausea, vomiting.
10. Genito-urinary—bladder distress.
11. Bones and joints—pain.
12. Nervous system—irritability, depression.
13. Skin.
 - (a) Location of lesions.
 - (b) Characteristic lesion (erythema, papules, vesicles, crusts, swelling thickening, plaques).
 - (c) Pruritis or itching.
When worse? Related to meals?
Cyclic? Related to dust?

14. Weight—loss or gain?
How long a period?
15. Operations (especially of the nose and throat).
Type of operation? Results?

D. Diet and environment.

1. Foods (cereals, egg, milk, fish, meats, vegetables, fruit, nuts, spices and condiments, chocolate and cocoa, honey, beverages).
 - (a) Any dislikes or disagreements?
 - (b) Worse after meals?
 - (c) Any which cause asthma, increased itching, urticaria, weeping, etc.?
2. Animals—Note effects of contact with any of the following:

Cat	Chicken	Cow
Dog	Parrot	Sheep
Canary	Horse	Other
		Animals
3. Bedding—Note the type and age of the following:

Pillows	Blankets
Mattresses	Comforters
4. Furnishings—Note the type and age of the following:

Furniture (wood or metal)
Upholstery (leather or cloth)
Stuffing in furniture
Drapes and Rugs (mothproofed?)
5. Clothing—Note the type and age of the articles used:

Wool	Silk	Furs
Cotton	Rayon	
6. Physical agents:

Heat	Sun	Water
Cold	Wind	
7. Miscellaneous:
 - (a) Dusts (especially house dust), fumes, etc.
 - (b) Cosmetics—Note type and effect of use.
 - (c) Insecticides—Note type used and frequency of use.
 - (d) Drug idiosyncrasy—Note effect of drugs used locally or by mouth.
8. Residence (city or country?)
Any recent change?
9. Home (house old or new?)
Damp or musty?

III. FAMILY HISTORY.

- A. Note the presence of: Eczema, allergic coryza or rhinitis, hay fever, asthma, urticaria, gastro-intestinal or food allergy, migraine in:
1. Mother, Father, Sisters, Brothers.
 2. Grandparents, Aunts, Uncles.
- B. Does the color of the eyes correspond to that of the mother or father?

Each child received a complete physical examination with special emphasis being placed on a careful observation of the nose and throat. A note was made as to whether the tonsils and adenoids had already been removed. A record was also kept of the number of sinus or antrum punctures the patient had received. Roentgenograms of the paranasal sinuses and the lungs were obtained in all cases with allergic disorders of the respiratory tract. Blood studies were made, and the differential counts were closely followed. As a whole very few outstanding physical defects were found among the allergic children.

Cutaneous tests were next applied. The glycerimized fluid extracts of the various atopens or allergens were used. The material is furnished in capillary tubes, there being enough of the fluid extract in each tube for one test. In this way there is no danger of contamination or spilling which occasionally occurs with the dry extracts. There is also no need for the hypodermic needles, syringes and cleansing solutions which are so essential in performing the intradermal tests.

The tests were applied by the pressure-puncture method. This was found to be the best method for infants and small children, especially when they would not remain quiet. The skin was cleansed with alcohol or ether, and after evaporation, the extract was expelled from the glass capillary tubes upon the cleansed skin at intervals of about four centimeters. Holding a sterile sewing needle nearly parallel with the skin, four oblique pricks or shallow punctures were made through the epidermis by pressing the point of the needle through each drop of extract. A new needle was used for each test. The punctures were confined to an area not more than three millimeters in diameter.

Sufficient fluid extract to produce a positive reaction in susceptible children was carried into the skin by these multiple punctures, and so in a few minutes the excess fluid on the surface of the skin was lightly wiped off. A similar test was carried out with a control glycerine solution and only those reactions in the test sites which were distinctly greater in intensity than that resulting from the control test were considered positive. The positive reactions (urticarial wheal surrounded by a zone of erythema) usually appeared in sensitive patients in 20 to 30 minutes.^{7, 8, 9}

The intracutaneous tests were used in the older children. The following method was employed. The outer aspect of the arm or the anterior aspect of the thigh was used. The skin was cleansed with alcohol and dried. A graduated 1 cc. (tuber-

culin) syringe with a hypodermic needle of 27 gauge and a half inch in length was selected. After loading the syringe and ejecting all air bubbles, the needle was inserted into the corium through the integument. Not more than 0.01 cc. of the sterile extract was injected. Control tests were similarly made with sterile extracting fluid. The tests were observed and read within ten to fifteen minutes.

The cutaneous tests were found to be of great value in hay fever and asthma, and of least value in urticaria and gastro-intestinal allergy. The size of the skin reaction was not always an indication of the importance of the test. A small response (erythema) could indicate sensitivity of clinical value. On the other hand, many markedly positive tests were of little value.

With the increasing use of the skin for the detection of various sensitivities it is important to keep in mind that the reactions elicited in the skin give merely a visible record in part at least of the immunologic past history of the patient and *per se* do not portray a present illness. A correlation between positive tests and the history and observations in the allergic patient is necessary for an accurate diagnosis. The question of variations in technique as well as irritability of reagents in nervous, emotional and physiologic activity, as well as the choice of the skin area tested, greatly affect the reactivity to the tests. The differences in interpretations frequently leave the management of the patient in a most unsettled state. Whether the skin test is pressure-puncture or intracutaneous, the accuracy of the conclusions must rest in the close correlation of symptoms and course with exposure and withdrawal respectively of the substances incriminated by this method of detection.¹⁰

When the results of the cutaneous tests were negative or unsatisfactory, the so-called elimination of trial diets were tried. In the older infant and in the young child, these diets were often very valuable. Numerous diets eliminating various foods were used. It was found that in the majority of the cases one or more of the following foods were responsible for the allergic manifestations: milk, cheese, egg, whole wheat, white potato, chocolate, tomato and orange. If the removal of these foods did not give satisfactory results, then diets eliminating beef, chicken, oatmeal, rye, peas, beans, spinach, apple or grape were tried.

Experience shows that success in connection with the trial diets depends in many instances upon the thoroughness with which they are carried out by the parents. A great deal of time must therefore be taken in explaining each diet in detail, emphasizing especially all positive sources of error. The general health of the children on elimination diets should be closely watched. Be sure the infant or child receives the proper number of calories, a sufficient amount of the minerals such as calcium and phosphorus, and an adequate supply of vitamins. In some instances, milk can gradually be returned to the diet in

the form of evaporated milk or a powdered milk.^{11, 12, 13, 14}

The diagnostic procedures mentioned above were applied to all the children studied in our allergy clinic. For economy of space and for the sake of clearness, the data obtained from all the histories, physical examinations, cutaneous tests, and elimination diets together with the treatment which was instituted has been condensed into six tables which are practically self-explanatory. An analysis of the information obtained in determining the cause of the allergic disease in each individual case together with the experiences encountered in the treatment leads up to the following facts, many of which are most helpful to the practicing physician called upon to take care of an allergic child.

TABLE 1. ECZEMA OF INFANCY AND CHILDHOOD — 115 cases (30.8 per cent.)

1. Sex: Male	60
Female	55
2. Age at First Visit:	
Below 1 year	44
1 to 5 yrs. incl.	37
6 to 10 yrs. incl.	18
11 to 15 yrs. incl.	16
3. Age at Onset:	
Below 1 year	84
1 to 5 yrs. incl.	23
6 to 10 yrs. incl.	4
11 to 15 yrs. incl.	4
4. Previous Allergic Disorders	0
5. Associated Allergic Disorders:	
Bronchial asthma	7
Hay fever	2
Urticaria	1
6. Family History:	
Positive	63
Negative or unknown	52
7. Physical Examination:	
Overweight (10%)	6
Otitis media	10
Mental retardation	2
Impetigo	1
Pneumonia	1
8. Eosinophile Differential Count:	
Below 5 per cent.	65
5 to 10 per cent.	25
Over 10 per cent.	13
No count	12
9. Cutaneous Tests:	
Positive	64
Negative or refused	51
10. Treatment	
Positive skin tests	
Removal from diet of	
Egg	12
Egg and wheat	5
Egg, wheat and milk	1
Egg, wheat and chocolate	1
Egg and milk	2
Egg and peas	1
Wheat	3
Wheat and oatmeal	1
Wheat, oatmeal and milk	2
Milk	7
Codfish	1
Tomato and orange	1
Orange and chocolate	1
Chicken and cheese	1

Contact with ragweed	2
Removal of silk	1
Removal of rayon	1
Referred into hospital	12
Treatment unsuccessful	9
Negative or no skin tests	
Elimination diets used with removal from diet of	
Egg	6
Egg and wheat	6
Egg, wheat and milk	3
Egg and potato	1
Wheat	2
Milk	3
Milk and potato	1
Potato	1
Chocolate	1
Tar alone very effective	15
Referred into hospital	3
Treatment unsuccessful	7

Note: In this table and the succeeding ones the numerals in each column indicate the number of cases.

TABLE II. ALLERGIC CORYZA (ATOPIC RHINITIS) — 46 cases (12.4 per cent.)

1. Sex: Male	33
Female	13
2. Age at First Visit:	
Below 1 year	6
1 to 5 yrs. incl.	8
6 to 10 yrs. incl.	20
11 to 15 yrs. incl.	18
3. Age at Onset:	
Below 1 year	6
1 to 5 yrs. incl.	31
6 to 10 yrs. incl.	15
4. Previous Allergic Disorders:	
Infantile eczema	8
5. Associated Allergic Disorders:	
Bronchial asthma	5
Chronic eczema	4
Urticaria	3
Hay fever	1
6. Family History:	
Positive	40
Negative or unknown	6
7. Physical Examination:	
Large tonsils	7
Ear infection	2
Adolescent goiter	1
8. Tonsils (at first visit)	
Present	18
Removed	28
9. Maxillary Sinus Roentgenograms:	
Positive	25
Negative	21
10. Eosinophile Differential Count:	
Below 5 per cent.	23
5 to 10 per cent.	11
Over 10 per cent.	8
No count	4
11. Cutaneous Tests (pressure-puncture or intradermal or both):	
Positive	16
Negative	30
12. Treatment	
Skin tests of value	
Symptom free after removal of	
Mustard	1
Banana, grape and pineapple	1
Egg and feathers	1

Feathers	5
Cat (dander)	2
Cat and orris root	1
Orris root	1
Goat	1
Skin tests of no value	
Improvement followed after removal of	
Egg	4
Egg and wheat	3
Egg, wheat and milk	1
Wheat	2
Wheat and potato (sinus drainage)	1
Milk	1
Tomato and apple	1
Apple and feathers	1
Feathers and reduction of house dust	1
Feathers and house dust	1
House dust	1
Removal of tonsils and adenoids	3
No improvement	11

TABLE III. HAY FEVER (POLLINOSIS)

51 cases (13.6 per cent.)

1. Sex: Male	44
Female	7
2. Age at First Visit:	
Below 1 year	0
1 to 5 yrs. incl.	4
6 to 10 yrs. incl.	24
11 to 15 yrs. incl.	23
3. Age at Onset:	
Below 1 year	1
1 to 5 yrs. incl.	23
6 to 10 yrs. incl.	21
11 to 15 yrs. incl.	6
4. Previous Allergic Disorders:	
Infantile eczema	10
Bronchial asthma	5
Urticaria	2
5. Associated Allergic Disorders:	
Bronchial asthma	10
Gastro-intestinal allergy	3
Chronic eczema	1
Urticaria	1
Allergic coryza	1
6. Family History:	
Positive	39
Negative or unknown	12
7. Physical Examination:	
Large tonsils	5
Ichthyosis	1
8. Tonsils (at first visit):	
Present	25
Removed	26
9. Maxillary Sinus Roentgenograms:	
Positive	28
Negative	18
No record	5
10. Eosinophile Differential Count:	
Below 5 per cent.	24
5 to 10 per cent.	19
Over 10 per cent.	4
No count	4
11. Cutaneous Tests:	
Positive	47
Negative	2
Refused	2
12. Treatment:	
Hyposensitization—good results	
Grasses	1
Russian thistle group	2
Wormwood—sage group	4
Ragweed group	24
Grasses and ragweed	7
Hyposensitization in progress the first time	2

Moved from Minnesota	2
Hyposensitization refused	6
No treatment	3

TABLE IV. BRONCHIAL ASTHMA

141 cases (37.8 per cent.)

1. Sex: Male	105
Female	36
2. Age at First Visit:	
Below 1 year	3
1 to 5 yrs. incl.	30
6 to 10 yrs. incl.	62
11 to 15 yrs. incl.	46
3. Age at Onset:	
Below 1 year	24
1 to 5 yrs. incl.	79
6 to 10 yrs. incl.	29
11 to 15 yrs. incl.	9
4. Previous Allergic Disorders:	
Infantile eczema	56
Hay fever	6
Urticaria	5
5. Associated Allergic Disorders:	
Hay fever	18
Chronic eczema	12
Urticaria	12
Allergic coryza	1
6. Family History:	
Positive	108
Negative or unknown	33
7. Physical Examination:	
Large tonsils	28
Barrel chest	12
Malnutrition	7
Nasal polyps	2
Adolescent goiter	1
8. Tonsils (at first visit):	
Present	84
Removed	57
9. Maxillary Sinus Roentgenograms:	
Positive	86
Negative	55
10. Eosinophile Differential Count:	
Below 5 per cent.	48
5 to 10 per cent.	51
Over 10 per cent.	29
No count	3
11. Cutaneous Tests:	
Positive	108
Negative or refused	33
12. Treatment:	
Positive tests of value	
Removal of foods	
Egg	2
Egg and wheat	1
Egg, cereals, milk and meat	1
Wheat	2
Milk	2
Rye	1
Grape	1
Peanut	1
Removal of inhalants	
Horse dander	3
Horse and cow dander	4
Horse and feathers	1
House dust	7
Cat dander	3
Feathers	15
Feathers and dog	2
Orris root	1
Fish glue	1

Removal of foods and inhalants	
Egg and feathers	2
Cereals, peas and feathers	1
Hyposensitization	
Grass groups	2
Ragweed group	11
Tree and ragweed	3
Grass and ragweed	10
Removal of foods and hyposensitization	5
Feathers and hyposensitization	2
House dust and hyposensitization	2
Positive tests of no value	
Potassium iodide and belladonnae gave most relief	7
Removal of tonsils and adenoids with sinus drainage	3
Moved from Minnesota	1
Tests negative or refused	
Removal of	
Egg	2
Egg, wheat and feathers	1
Wheat and feathers	1
Feathers	3
House dust	2
Horse and cow dander	1
Removal of tonsils and adenoids	2
Infection	3
Treatment unsuccessful	24

TABLE V. URTICARIA — 17 cases (4.6 per cent.)

1. Sex: Male	6
Female	11
2. Age at First Visit:	
Below 1 year	2
1 to 5 yrs. incl.	6
6 to 10 yrs. incl.	3
11 to 15 yrs. incl.	6
3. Age at Onset:	
Below 1 year	4
1 to 5 yrs. incl.	7
6 to 10 yrs. incl.	3
11 to 15 yrs. incl.	3
4. Previous Allergic Disorders:	
Infantile eczema	1
5. Associated Allergic Disorders:	
Gastro-intestinal	3
6. Family History:	
Positive	5
Negative	10
7. Physical Examination:	
Large tonsils	1
Many dental caries	1
8. Tonsils (at first visit)	
Present	15
Removed	2
9. Maxillary Sinus Roentgenograms:	
Positive	1
Negative	16
10. Eosinophile Differential Count:	
Below 5 per cent.	14
5 to 10 per cent.	3
11. Cutaneous Tests:	
Positive	4
Negative	9
Unsatisfactory	4
12. Treatment	
Skin tests of value	
Symptoms free after removal of	
Tomato, carrot, orange, apple and chocolate	1
Banana, grape and pineapple	1
Skin tests of no value, negative or unsatisfactory	

Elimination diets used with relief after removal of

Egg and wheat

Egg, wheat, potato, tomato, orange and chocolate

Egg, milk and spinach

Milk

Tomato

Tomato and orange

Removal of wool

Avoidance of heat (hot baths)

Alkaline ash diet and alkali

Treatment unsuccessful

TABLE VI. GASTRO-INTESTINAL ALLERGY
3 cases (0.8 per cent.)

1. Sex: Male	
Female	
2. Age at First Visit:	
Below 1 year	
1 to 5 yrs. incl.	
6 to 10 yrs. incl.	
11 to 15 yrs. incl.	
3. Age at Onset:	
Below 1 year	
1 to 5 yrs. incl.	
6 to 10 yrs. incl.	
4. Previous Allergic Disorders:	
5. Associated Allergic Disorders:	
6. Family History:	
Positive	
Negative	
7. Physical Examination:	
Large tonsils	
8. Tonsils (at first visit):	
Present	
Removed	
9. Maxillary Sinus Roentgenograms:	
Positive	
Negative	
10. Eosinophile Differential Count:	
Below 5 per cent.	
5 to 10 per cent.	
11. Cutaneous Tests:	
Positive	
Negative	
12. Treatment	
Skin tests of value	
Symptoms free after the removal of cheese	
Skin tests of no value and elimination diets used	
Improvement followed after the removal from diet of	
Milk and wheat	
Wheat and chocolate	
Before treatment subjects had vomiting and abdominal pain or colic. One case complained of headaches.	

Table I. represents the data secured from the children with eczema. There is more or less an equal distribution as to sex. The onset of this allergic condition is very early in life so that it is usually not preceded by any other allergic disease. Very few cases have associated allergic disorders. With the onset of another allergic condition, the eczema may suddenly disappear. Many cases of eczema reveal positive inhalant or pollen tests and these cases later develop allergic coryza, hay fever, or asthma. Food atopsens (allergens) play an important part as causative

agents in atopic or allergic eczema of infancy and childhood. Cutaneous tests, however, do not assist in some cases in determining this food allergy. Elimination or trial diets must be used. The eczematous infants on artificial feeding and with only marked egg white sensitivity by cutaneous testing constitute the most difficult group to treat. The external application of tar still remains a fairly good form of treatment. The single use of the elimination diet, of tar, or of any other treatment does not always give entirely satisfactory results. Various combinations of therapy are now considered to be most effective. Some infants have skin disorders which resemble very closely atopic eczema but which are probably not due to an allergic disturbance. Many of these cases have a negative family history for allergic disorders. Contact dermatitis is rare.

The allergic disorders with predominant nasal manifestations are considered in Tables II. and III. There is allergic coryza with its characteristic perennial history, and hay fever or pollinosis with its strong seasonal occurrence. The incidence of these disorders appears to be greater in the males than in the females. Many cases of allergic coryza have their onset during the preschool period of childhood. These children are often referred to as having "one cold after another." The highest incidence of nose and throat surgery prior to admission occurs in this group. The results are usually reported as unsatisfactory. The scratch or pressure-puncture skin tests are not very helpful. Intracutaneous testing is strongly indicated in this disorder. In the absence of positive cutaneous tests, the response to trial or elimination diets is most encouraging. Of all the allergic diseases, allergic coryza requires the most thorough elimination of offending foods from the diet, or irritating inhalants from the environment in order to obtain improvement. Food sensitivity producing allergic coryza may be replaced by inhalant sensitivity. Then asthma can appear as an associated allergic disorder.

Hay fever is an allergic disorder which appears earlier in life than the lower age limit set by many physicians. The onset in many of the cases is in the preschool period. Bronchial asthma becomes in children an important associated allergic disorder. Cutaneous testing is very satisfactory. Hyposensitization or desensitization gives encouraging results.

In Table IV. is condensed all the data obtained from a thorough review of the cases who were admitted to the clinic with a diagnosis of bronchial asthma. Hereditary tendency is very strong in asthma. Here is an allergic disease in which there is a high incidence of bilateral hereditary influence with a corresponding early onset of symptoms in the off-springs. One-fifth of the cases start in infancy and about one-half have their origin in the preschool period of childhood. Eczema is a common forerunner of asthma. The so-called "false positive food tests" which are frequently found in some allergic diseases, especially bronchial asthma, are closely related to a history of

infantile eczema. Those children who have had eczema, tend to have positive cutaneous reactions to the ingestants, and these positive food tests are of little or no clinical value. More studies are necessary in order to make this observation an unquestionable factor and a time-saving measure in the interpretation of allergy skin tests and the outlining of the treatment of bronchial asthma.

The earlier the asthma manifests itself, the more likely the child is to develop concomitant allergic conditions. Individuals from strongly allergic families are somewhat more prone to the development of concomitant allergic conditions. In infancy and early childhood, the food allergens are very important, and in the latter part of the preschool period the foods and inhalants (animal emanations) are of equal importance. There is then an increasing sensitivity to the inhalants during the school years. The pollens become very important at puberty. Food sensitivity in early life is often followed in the same individual by sensitivity to inhalants which may prolong the asthma over a long period of time. House dust is becoming more and more important as an allergen. Recent studies tend to show that the potent substance in house dust is produced in the process of the aging of cotton. Secondary causes such as street dust, smoke, cold air play an important part in asthma of long duration. Iodides are effective in treatment although the so-called rhinitis occasionally found in association with asthma may be a reaction to the iodides if this form of treatment is being used. Calcium therapy has been very discouraging.

Although quite a number of the asthmatic children had large tonsils, only a small number were permitted to have them removed. In some instances, the asthma improved, in other cases, it became worse. It has therefore been suggested that the removal of tonsils and adenoids in allergic children should never be performed until the allergic investigations have been thoroughly carried out and the allergic symptoms well under control. If there is no urgent reason for the removal of the tonsils and adenoids, and they do not appear to be definitely infected, the operative procedure should be postponed pending the results of allergic treatment.

A review of the cases of urticaria and gastrointestinal allergy is presented in Tables V. and VI. The two allergic disorders have many things in common. The females predominate in both diseases. The family histories are more often negative than positive. The cutaneous tests indicate specific sensitivity in only a small number of patients. The intradermal tests may be tried. Trial or elimination diets are of greatest help although the results are not consistent. Acute infections are often the precipitating cause although food sensitivity appears to be the most common underlying cause.

SUMMARY AND CONCLUSIONS

1. A clinical review of the study made and the

ANALGESIC ANTIPYRETIC

C.T. No. 260

CODOPHEN, E.B.S.

Distinctive in Appearance and Flavour

Each tablet contains:

Ebsal, E.B.S.	
(Acetylsalicylic Acid)	3 grs.
Phenacetine	2 grs.
Caffeine Citrate	1/4 gr.
Codeine Phosphate	1/4 gr.

DOSE—One to Three Tablets
as Required.

Indicated in Influenza, Tonsillitis, Neuritis, Lumbago, Muscular Rheumatism, Sciatica and Febrile Conditions.

Also C.T. No. 260 A Codophen Stronger, E.B.S. — containing Codeine Phosphate 1/2 grain.

Clinical Samples on Request.

The
E. B. Shuttleworth Chemical Co.

Limited

MANUFACTURING CHEMISTS

TORONTO

CANADA

A Representative Stock of E.B.S. products
carried by

CAMPBELL & HYMAN, LTD.

236 Edmonton Street

Winnipeg

Manitoba

R**DAGENAN**

(M and B 693)

In the Treatment of

PNEUMOCOCCAL**INFECTIONS****BRATHWAITES LTD.**

Phone 21 085

PORTAGE at VAUGHAN

WINNIPEG

treatment carried out in 373 children with allergic disorders is presented.

2. The allergic diseases encountered are eczema, allergic coryza, hay fever, bronchial asthma, urticaria and gastro-intestinal allergy. They belong to that section of a newer classification of allergies entitled natural or atopic hypersensitiveness, characterized by a strong hereditary tendency.

3. Our experience in the care of the allergic children indicates that a large number of cases can receive satisfactory relief. In obtaining this result, no elaborate methods of diagnosis are necessary, but instead a few rather simple procedures should be followed. All are considered of equal importance and are as follows:

- (a) A very complete history.
- (b) Cutaneous tests.
- (c) Elimination or trial diets.

4. Treatment involves the thorough removal of the offending foods from the diet, or the irritating inhalants from the child's environment. Polled allergy responds very well to proper and careful desensitization.

5. A small number of patients require surgical treatment in order to obtain relief.

6. The success depends upon the avoidance of all haste in the diagnosis and treatment. Delay in relieving the child are often necessary because histories must be retaken, cutaneous tests repeated and trial diets rearranged. A rather exhaustive search should be conducted for the offending allergen or allergens, and an effort should be made to avoid placing the patient on some form of drug therapy, thereby dismissing the search.

BIBLIOGRAPHY

1. Von Pirquet and Schick: Die Serum Krankheit, Monograph, Leipzig and Wien, 1905.
2. Doerr: Ergebn. Hyg. Bakt. Immun. Therap. 5:71, 1922; "Die Idiosynkrasien" in Mohr and Staehelin's Handbuch der inneren Medizin, 2nd Edition, 448, 1926.
3. Zinsser: A textbook of bacteriology. Appleton Co., 6th Edition, 292, 1927.
4. Coca, A. F.: "Atopy" in the Newer Knowledge of Bacteriology and Immunology, Univ. of Chicago Press, 1004, 1929.
5. Rackemann, F. M.: Clinical Allergy-Asthma and Hay Fever, New York, Macmillan Company, 1931.
6. Rackemann, F. M.: J.A.M.A., 106:976, 1936.
7. Dushan, Sidney S., and Cohen, A. I.: Arch. Pediat. 50:867, 1933.
8. Stewart, Z. W.: Jour. Allergy, 5:601, 1934.
9. Alexander, H. L.: Journal-Lancet, 56:131, 1936.
10. Current Comment, J.A.M.A., 106:1202, 1936.
11. Rowe, A. H.: J.A.M.A., 91:1623, 1938.
12. Hopkins, J. G., Water, Irene and Kenten, Beatrice: Jour. Allergy, 2:239, 1931.
13. Waters, Irene: Jour. Allergy, 2:225, 1931.
14. Cobb, Clement, B. P.: Am. Jour. Dis. Child. 50:189, 1935.

Special Articles and Association Notes

The Manitoba Medical Association Review

Formerly the Bulletin of the Manitoba Medical Association

ESTABLISHED 1921

WINNIPEG, MARCH, 1939

Published Monthly by the
MANITOBA MEDICAL ASSOCIATION

Editorial Office

102 MEDICAL ARTS BUILDING, WINNIPEG

Editor

C. W. MACCHARLES, M.D. (MAN.)

Advisory Editor

ROSS B. MITCHELL, B.A., M.D., C.M. (MAN.),
F.R.C.P. (C.)

Business Manager

J. GORDON WHITLEY

Annual Subscription - \$2.00

*Editorial or other opinion expressed in this Review is not necessarily
sanctioned by the Manitoba Medical Association*

[COPYRIGHT]

Minutes of Executive Meeting

Summary of minutes of a meeting of the Executive Committee of the Manitoba Medical Association held in the Medical Arts Club on Tuesday, January 17th, 1939, at 6.30 p.m.

Present.

Officers and Members of Executive Committee:

Dr. W. S. Peters	Dr. O. C. Trainor
(Chairman)	Dr. E. W. Stewart
Dr. W. G. Campbell	Dr. C. E. Corrigan
Dr. W. W. Musgrove	Dr. O. J. Day
Dr. Geo. Brock	Dr. W. F. O'Neill
Dr. C. W. Burns	Dr. C. W. MacCharles.
Dr. C. B. Stewart	

Chairman, Committee on Sociology:

Dr. E. S. Moorhead.

General Secretary, Canadian Medical Association:

Dr. T. C. Routley.

Following dinner the President called the meeting to order and welcomed Dr. Routley as a guest of the Executive Committee:

Minutes of Last Three Executive Meetings.

It was moved by Dr. O. C. Trainor, seconded by Dr. C. B. Stewart: THAT the minutes of the last three meetings be taken as read. —Carried.

Health Insurance: Report of Committee on Sociology.

A questionnaire with regard to Health Insurance had been received from Dr. Wallace Wilson, Chairman of the Committee on Economics of the Canadian Medical Association. A report was submitted by the Committee on Sociology (Economics) of the Manitoba Medical Association, and this report was considered in detail and amended in some respects.

The first part of the report dealt with the principles adopted by General Council of the Canadian Medical Association at the Annual Meeting at Ottawa in 1937, and printed in the September issue of the Canadian Medical Association *Journal* of that year. There were 15 clauses and all were accepted with the exception of 6, 10, 12 and 18 which were amended as follows:

(6) That there be a Health Insurance Fund and that "Regional Medical Officers," to act as supervisors and referees be appointed, paid and controlled by the Central Board or Commission.

(10) Deleted.

(12) Amended as follows:

That the medical benefit be organized as follows:

- (a) Every qualified licensed medical practitioner to be eligible to practice under the Plan.
- (b) The insured person to have freedom of choice of doctor.
- (c) The medical service to be based upon making available to all a complete medical service, which would include health supervision and the treatment of disease. (A complete medical service consists of medical care, general and specialist, hospitalization, ancillary treatments, nursing, dental services and health.

(18) Amended as follows:

That the volume of work demanded from and the remuneration to members of the various professions be such as to assure an adequate standard of medical service.

The second part of the report consisted of a memorandum "Some Problems in the Consideration of Health Insurance." These problems were divided into "Accepted" and "Controversial." The first group consisted of points about which there was not likely to be a difference of opinion, and the second group consisted of items which would require considerable discussion before they could be settled.

Contract Practice.

With regard to the general principles that should form the basis of all contracts, it was suggested that the Canadian Medical Association should set up standards for contract practice. It was agreed that the Manitoba Medical Association should attempt to secure information with regard to contract practice in the province.

Lodge Practice.

It was agreed an attempt should be made to secure information with regard to Lodge Practice in the province.

Voluntary Health Insurance.

The Committee had not as yet had time to deal with the problem of Voluntary Health Insurance.

It was moved by Dr. E. S. Moorhead, seconded by Dr. C. W. Burns: THAT the report of the Committee on Sociology, as amended, be adopted, and that a copy be forwarded to the Chairman of the Committee on Economics of the Canadian Medical Association. —Carried.

Dr. Routley pointed out that this plan that was considered was tentative and it was the intention of the Canadian Medical Association to secure an opinion from each of the Provincial Associations.

Report of Committee on Constitution and By-Laws.

In the absence of Dr. F. D. McKenty, Chairman of the Committee, the Secretary read the report of a meeting of the Committee held on January 9th. Dr. R. I. Harris, Chairman of the Committee on Constitution and By-Laws of the Canadian Medical Association, had written a letter suggesting that a discussion could be carried on between the Committee on Constitution and By-Laws of the Manitoba Medical Association and the corresponding Committee of the Canadian Medical Association with a view to clearing up the differences of opinion with regard to federation. At the meeting of this Committee the following motion was passed: THAT Dr. McKenty be instructed to write to Dr. Harris and ask for his criticisms of the report submitted to the Annual Meeting of the Manitoba Medical Association.

The report of the Committee on Constitution and By-Laws was adopted.

Brandon-Cornwallis Health Unit.

Correspondence with regard to the Brandon-Cornwallis Health Unit was considered, and reports of the Legislative Committee and Committee on Sociology adopted.

Salaries to State Medical Officials.

A letter had been received from the Canadian Medical Association asking if the Manitoba Medical Association would be in favor of the Canadian Medical Association inquiring into salaries paid to state medical officials and employees of institutions. It was agreed that it would be advisable for this inquiry to be carried out

and the Manitoba Medical Association Executive agreed to co-operate.

Rural Relief Cases.

The Committee on Sociology reported that the questionnaire is to be sent out to rural practitioners.

Letter from Secretary of Honorary Attending Staff of St. Boniface Hospital.

A letter and memorandum from the Secretary of the Honorary Attending Staff of St. Boniface Hospital dealing with the question of the responsibility towards patients as it affects the hospital interne and the attending doctor, was referred to the Executive Committee of the Canadian Medical Association for an opinion.

Annual Meeting.

Dr. Routley explained that he would like an expression of opinion with regard to the date that would be most suitable in September for the Manitoba Medical Association Annual Meeting. It was agreed that the Association would accept whatever dates were suitable after Dr. Routley had consulted with the other three western provincial associations.

Appointment of Representatives to Workmen's Compensation Referee Board.

A motion was passed instructing the officers to make the necessary appointments.

Senior Members.

A Committee was appointed to suggest names for senior membership in the Canadian Medical Association.

Appointment of Representatives to Cancer Relief and Research Institute.

The officers were instructed to appoint the necessary representatives.

Representative from Winnipeg Medical Society on Manitoba Medical Association Executive.

A letter was read from the Winnipeg Medical Society advising that Dr. O. J. Day had been appointed their representative on the Executive Committee of the Manitoba Medical Association.

Treasurer's Report.

A motion was passed authorizing the treasurer to be bonded, to invest certain funds in bonds and to pay an honorarium to the Editor of the Review.

The remaining items of business on the agenda were deferred to the next meeting of the executive committee.

The meeting then adjourned.

Visit of Secretary of Canadian Medical Association

Dr. T. C. Routley, General Secretary of the Canadian Medical Association, visited Winnipeg on January 17th and 18th. During his visit he

attended the meeting of the Executive Committee on the evening of Tuesday, January 17th. In addition he attended meetings of the following committees and groups: Legislative Committee, Sociology Committee, Radio Committee, Victorian Order of Nurses, Programme Committee, Maternal Mortality Committee, Education Committee, Committee on Ethics, Cancer Relief and Research Institute and the Canadian Society for the Control of Cancer.

Maternal Welfare Committee

A Suggested Service on Obstetric Problems

The Maternal Welfare Committee of the Manitoba Medical Association have decided to initiate a system of replies to physicians enquiring for information on obstetric problems.

Any doctor desiring information about any general obstetric problem or about the care of a specific type of case, is invited to write, outlining the problem. After consideration the committee will reply giving whatever advice they consider may be helpful.

Problems which bring out points of general interest to the profession will be published in the *Review*, but the name of the doctor sending in the letter will be withheld.

The Committee hope that by initiating such a service they may be able not only to help the individual physician but also to stimulate interest in obstetric problems. They also expect to derive from such letters information which will enable the Committee to appreciate better the type of work they should be doing.

Communications may be sent to the Secretary, Manitoba Medical Association, 102 Medical Arts Building, and will be handed to the Maternal Welfare Committee for consideration and action.

Annual Meeting

Scientific Programme

Members of the Manitoba Medical Association are invited to submit papers for the scientific programme of the annual meeting in September, 1939. Those wishing to deliver papers should forward copies or an abstract. Applications will be received up to May 1st. The selection will be made by the Scientific Programme Committee.

Suggestions from members as to particular subjects which they would wish to have discussed are also invited.

Communications may be sent to the Honorary Secretary, Manitoba Medical Association, 102 Medical Arts Building, Winnipeg. They will be sent on to the Committee for consideration and action.

Sectional Meeting American College of Surgeons

Fort Garry Hotel, Winnipeg
March 29-30-31, 1939

There will be a sectional meeting of the American College of Surgeons at the Fort Garry Hotel, Winnipeg, on March 29th, 30th and 31st, 1939.

This sectional meeting includes the members from Minnesota, South Dakota, North Dakota, Western Ontario, Manitoba, Saskatchewan and Alberta.

There will be clinics at the hospitals, panel discussion and hospital conferences.

Among the distinguished clinicians taking part will be Dr. George Crile, Cleveland, Chairman of the Board of Regents of the American College of Surgeons; Dr. Howard C. Naffziger, San Francisco, Professor of Surgery, University of California, and President of the American College of Surgeons; and Dr. Malcolm T. MacEachern, Associate Director of the American College of Surgeons.

A free public meeting will be held in Grace Church at 8.00 p.m. on March 31st.

CANADIAN MEDICAL ASSOCIATION

Application for membership may be sent to the Secretary, 184 College Street, Toronto 2, Ontario.

Annual fees, including subscription to the *Canadian Medical Journal*, \$10.00.

Membership year starts January 1st.

BUILD-UP FOOD



By virtue of its outstanding nutritional value, high digestibility and appetite-provoking flavor, Vi-Tone enjoys nation-wide commendation as a build-up food. Non-acid forming, eminently recommended for invalids and convalescents.

VI-TONE

FOOD » TONIC » BEVERAGE

ONLY THESE SOLUTIONS ARE VACOLITER PROTECTED



B A X T E R ' S

INTRAVENOUS SOLUTIONS IN VACOLITERS

*Baxter's can help your patients
and your budget*

With Baxter's on your shelves you *know* you've provided fine, safe products for intravenous infusions. You *know* each lot of Baxter's has been tested and retested by *experts* to protect you and your patients. You *know* each Vacoliter of Baxter's is sealed from contamination . . . from prying fingers . . . by a strong *metal* seal.

All these things need not cost you any more than you pay today for intravenous solutions and you may find Baxter's, with all their extra

advantages, actually *less expensive* than hospital made solutions . . . for Baxter's save you the expense of wastage . . . labor . . . replacements on intravenous equipment and a dozen hidden costs that sap your budget. With Baxter's you need never choose between a patient's safety and a balanced budget . . . Baxter's can help you gain *both*, because Baxter's are as safe and fine as you could ask . . . and they are priced to keep your costs in line with what you can afford.

**BAXTER LABORATORIES
OF CANADA, LIMITED
TORONTO**

DISTRIBUTED EXCLUSIVELY BY
**INGRAM & BELL LIMITED
TORONTO**
MONTREAL — WINNIPEG — CALGARY



Department of Health and Public Welfare

NEWS ITEMS

The following is an article entitled "Posture" written by Lucy Porter Sutton, M.D., Assistant Professor of Pediatrics, New York University Medical College, and recently published in "Preventive Medicine":—

"Theoretically, any child who has a sturdy heritage, is well nourished and is brought up in a good environment, will have an efficient body. Some children who have, of these three factors, only the sturdy physique, have good posture. Others have excellent care and environment, but because they are built on thin and scraggly lines achieve good body mechanics or posture only through conscious effort. However, other factors enter into the production of poor posture, some of them as uncontrollable as the inheritance of body build. Prolonged illness, or in small children short acute illnesses, fatigue, worry, shyness, all may be the precipitating cause of poor posture.

"Why some babies have firm muscles and others fed similarly are flabby and thin, or flabby and fat, is a mystery to pediatricians. Even more inexplicable are the husky babies who are fed and cared for contrary to the way we think is best. In other words, how a child is going to turn out is somewhat on the laps of the gods. Even so, a fundamentally inefficient body can be made efficient, and certainly every controllable factor should be considered in order to prevent bad posture.

"There are two good reasons for aspiring to good posture. One is the esthetic. A middle-aged man or woman with an unconcealable abdomen and round shoulders is not a lovely sight, particularly in profile. Many people whose faces are not beautiful give the appearance of good looks because of the beauty of their carriage. A thin child who stands straight does not look as pathetic as the one whose abdomen is in front of his flat chest, whose back caves in; nor does the erect overweight child look so fat. Beyond this is the fact that prolonged strain of unevenly used muscles may and often does lead to structural and physiological abnormality.

"The physiological abnormalities are those first noted in childhood, particularly fatigability, constipation and poor nutrition. It may be difficult to decide whether the poor posture causes or is caused by these. If both are present there is a vicious circle, so that both must be treated at the same time. If all mothers realized in how many ways insufficient rest affects their children, and if physicians would take the time to inquire in detail about the child's daily regime there would be fewer irritable and poor postured children. A common experience is encountered when at about the age of six children first go to school. Up to then it is relatively easy for the mother to see that the child gets enough sleep; if he goes to bed late, he sleeps late in the morning and is out of the way when she does her work. He is not used to regular hours of sleeping, but gets enough. Suddenly at the time when he is losing his baby chubbiness, and is lengthening out, he is precipitated into a regime of six hours of school, a hurried lunch hour, and no time to catch up on sleep if he stays up late—as most New York City public school children do. Only the special classes for handicapped children arrange for rest periods in the afternoon. It is conceivable that we would have fewer of the handicapped if all could have this extra daily rest.

"Several small details appear to help a child develop with good posture if attention is paid to them from the time they are born. For instance, the bed should always be firm and flat with no sagging and no pillow. Shoes should be flexible and designed only for protection until the child has lost the fat pads under the

longitudinal arch. After that, at least for a city child, the soles should be shaped so that the leather of the uppers comes under and close to the arches, thus giving a certain amount of support. High shoes are not necessary. The shape of the shoe should be such that the weight of the body will not fall on the inner border of the foot. Clothes should never be tight. Elastics around the middle just below the ribs make the stomach stick out. Garters for long stockings fastened to waists pull the shoulders down and forward, since children always want their clothes tight. In other words, care should be taken that none of the details of a child's environment constitute a handicap to good posture. Furniture obviously enters into the matter. Chairs and tables should be of such size and shape that the child will not be tempted to slump.

"The effect of food on the development of good posture except in the case of rickets is uncertain. Vitamin D can, of course, prevent this cause of prominent abdomen, weak feet and scoliosis. In some children it seems that a diet which includes large amounts of starchy foods produces enlarged abdomens. In others too much milk seems to do the same thing.

"Poor posture may be directly caused by defective vision or eye strain, or by diminished hearing. Children, at least by the time they enter school, and periodically thereafter, should have competent and thorough examination of both eyesight and hearing. Either of these handicaps may be present to a degree which constitutes a handicap to the child even when not detectable by ordinary examination.

"Too little attention has been paid to the psychological causes of poor posture. A child who is doing poor work in school, who has a secret sorrow, who thinks he is misunderstood or who has been frightened often shows it in his hang-dog position. If the trouble can be straightened out promptly, the posture may take care of itself. If it is of long standing, positive measures will have to be taken not only to get at the cause of the emotional difficulty, but to get the body back into good shape. The psychological care of the child should be so reasonable and understanding that he will not develop a state of mind which will be reflected in his posture.

"An important reason for paying attention to posture in early childhood is the fact that structural permanent bony changes may take place as a result of long standing functional poor posture. The most common are scoliosis and weak feet both of which may greatly handicap the individual in his physical activities. Watching many children over a period of years shows clearly that many in the pre-adolescent years develop functional scoliosis of varying grades. Whether this is to become permanent in a given child cannot be foretold. Many, as they get past the period of rapid body changes and difficult adjustments, will lose their physical evidences of turmoil. In others the deformity will increase and become permanent. The obvious answer is that all children should ideally be given adequate consistent and intelligent instruction in good body mechanics. School seems to be a good place to do this. The value of such training has been demonstrated in certain private schools and in the public schools of Boston.

"Studies of the body mechanics of young people in high schools and colleges have shown all too clearly the need for more and better attention to posture in the elementary schools, and before. The type of attention which we think helps a child develop normally in this respect is detailed and time consuming. Because most children need it, it is easy to become discouraged, or so used to seeing children with bad posture that its presence does not quite penetrate our consciousness.

Posture is definitely something of which all those who deal with children should be aware in our ideal of helping in the development of a healthy and physically efficient race."

COMMUNICABLE DISEASES REPORTED

Urban and Rural — January, 1939

Occurring in the Municipalities of:

Mumps: Total 170—St. James 78, Winnipeg 70, Kildonan East 12, Unorganized 3, Kildonan West 2, Morris Town 2, Brandon 1, Strathclair 1, Tuxedo 1.

Scarlet Fever: Total 145—Winnipeg 70, Brandon 21, Rivers 10, Transcona 6, Rhineland 5, Miniota 4, Brooklands 3, Flin Flon 3, Kildonan West 3, Macdonald 2, St. Vital 2, Unorganized 2, Woodworth 2, Assiniboia 1, Boissevain 1, Eriksdale 1, Fort Garry 1, Kildonan North 1, Louise 1, Oakland 1, Pembina 1, Portage City 1, Roland 1, The Pas 1, Turtle Mountain 1.

Measles: Total 127—Argyle 28, Lorne 19, Kildonan West 14, Roblin Rural 14, Stanley 8, Blanshard 6, Louise 5, Unorganized 5, Winnipeg 5, Brandon 4, Pembina 3, Rhineland 3, St. Clements 3, Norfolk South 2, Springfield 2, Boissevain 1, Flin Flon 1, Portage City 1, Portage Rural 1, St. James 1, Turtle Mountain 1.

Chickenpox: Total 117—Winnipeg 20, Unorganized 18, Kildonan East 13, Arthur 12, St. Boniface 8, Melita 7, Dauphin Town 6, Flin Flon 6, Rockwood 6, Transcona 4, Selkirk 3, Thompson 3, Morris Town 2, Portage City 2, St. James 2, Brenda 1, Dauphin Rural 1, Edward 1, Franklin 1, Kildonan West 1.

Whooping Cough: Total 49—Winnipeg 28, Lawrence 7, Unorganized 6, Hanover 3, Arthur 1, Brandon 1, Flin Flon 1, Minitonas 1, Swan River Rural 1.

Tuberculosis: Total 32—Winnipeg 8, Unorganized Kildonan North 2, St. Boniface 2, St. Vital Boulton 1, Cartier 1, Cypress North 1, Dauphin Rural 1, Ellice 1, Gimli Town 1, Grandview Rural Hanover 1, Kildonan East 1, Minnedosa 1, Rockwood 1, Rosser 1, Shell River 1, Siglunes 1.

Diphtheria: Total 25—St. Clements 12, Winnipeg Bifrost 2, Hanover 2, Kildonan West 2, Flin Flon

Erysipelas: Total 8—Winnipeg 5, Portage City Selkirk 1, Transcona 1.

German Measles: Total 4—Brandon 4.

Smallpox: Total 3—Shell River 2, St. Francois 1.

Trachoma: Total 3—Hanover 3.

Diphtheria Carrier: Total 3—Winnipeg 3.

Typhoid Fever: Total 2—Birtle Town 1, Tache 1.

Lobar Pneumonia: Total 2—Brandon 1, Strathcona

Influenza: Total 1—Winnipeg 1.

Veneral Disease: Total 116—Gonorrhoea 66, Syphilis 50.

DEATHS FROM ALL CAUSES IN MANITOBA For the Month of December, 1938

URBAN—Cancer 37, Pneumonia 18, Tuberculosis Septic Throat 3, Influenza 2, Syphilis 2, Whooping Cough 2, Chickenpox 1, Typhoid Fever 1, Erysipelas 1, all others under 1 year 27, all other causes 15 Stillbirths 15. Total 304.

RURAL—Pneumonia 24, Cancer 23, Tuberculosis Influenza 9, Typhoid Fever 2, Erysipelas 2, Cerebral Spinal Meningitis 1, Chickenpox 1, Diphtheria Puerperal Septicaemia 1, all others under 1 year 165, all other causes 165, Stillbirths 14. Total 280.

INDIANS—Tuberculosis 12, Influenza 4, Whooping Cough 3, Pneumonia 1, all others under 1 year 1, all other causes 3, Stillbirths 1. Total 25.

SECONDARY ANEMIAS

Although copper does not enter into the formation of the haemoglobin molecule, numerous studies have revealed its importance as a "metabolic activator" for the best utilization of iron.

Abbott's Cofron Elixir is an agreeable-tasting tonic of whole liver concentrate with the copper and iron present in definite amounts. Each fluid ounce represents $1\frac{1}{3}$ ounces of fresh liver, 1 grain of iron and $1/25$ grain of copper. Cofron Elixir is indicated in non-specific conditions in which there is a decreased red cell count or a lowered haemoglobin percentage. Recovery from any weakening illness, if it has led to anaemia, will be hastened by the administration of Cofron Elixir. Detailed literature will be sent upon request. Abbott Laboratories Ltd., 388 St. Paul St. West, Montreal.

ABBOTT'S COFRON ELIXIR

Executive Officers

President

W. S. PETERS, M.D. (Man.).

First Vice-President

W. E. CAMPBELL, B.A., M.D. (Man.).

Second Vice-President

C. B. STEWART, M.D. (Man.), F.R.C.S. (Edin.).

Honorary Secretary

C. W. MacCHARLES, M.D. (Man.).

Honorary Treasurer

C. E. CORRIGAN, B.A., M.D. (Man.), F.R.C.S. (Eng.).

Past President

C. W. BURNS, B.A., M.D., C.M. (Man.), F.R.C.S. (C.).

Advisory Council

President of Manitoba Medical Association:

W. S. PETERS, M.D. (Man.).

Chairman of Council of College of Physicians and Surgeons:

H. D. KITCHEN, M.D., C.M. (Man.).

Dean of Faculty of Medicine:

A. T. MATHERS, M.D., C.M. (Man.), F.R.C.P. (C.).

Deputy Minister of Health and Public Welfare:

F. W. JACKSON, M.D. (Man.), D.P.H. (Tor.).

May Be Added:

M.O.H. of District.

President of District Society.

Others as required.

Members of the Executive

Members Elected at Large

S. G. HERBERT, M.D. (Man.),
Winnipeg.

E. K. CUNNINGHAM, M.D., C.M.
(McG.), Carman.

E. W. STEWART, M.D. (Man.),
Winnipeg.

GEO. BROCK, B.A., M.D., (Man.),
M.S. (Minn.), Winnipeg.

E. J. SKAFEL, M.D. (Man.),
Minnedosa.

E. L. ROSS, M.D. (Man.),
Ninette.

Representatives of College of Physicians and Surgeons of Manitoba

H. O. McDIARMID, M.D. (Man.),
F.R.C.S. (C.), Brandon.

W. G. CAMPBELL, M.D., C.M.
(McG.), Winnipeg.

W. W. MUSGROVE, M.D., C.M.
(Man.), F.R.C.S.

Representative on Canadian Medical Association Executive Committee

O. C. TRAINOR, M.D., C.M.
(McG.), Winnipeg.

Representatives of District Medical Societies

Southern

W. F. O'NEILL, M.D. (Man.).

Central

W. H. CLARK, M.D. (Man.).

Brandon and District

J. R. MARTIN, M.D. (Man.).

North-Western

GEO. CLINGAN, M.D., C.M. (Tor.).

Winnipeg Medical

O. J. DAY, M.D. (Tor.).

Northern

R. E. DICKS, M.D. (Man.).

Committees

Committee on Sociology

E. S. MOORHEAD, B.A. (T.C.D.),
M.B., B.Ch. (Dub.), B.A.O.,
F.R.C.P. (C.), Chairman.

J. A. GUNN, C.B., O.B.E., B.A.,
M.D., C.M. (Man.), F.R.C.S.
(C.).

ROSS B. MITCHELL, B.A., M.D.,
C.M. (Man.), F.R.C.P. (C.).

C. E. CORRIGAN, B.A., M.D. (Man.),
F.R.C.S. (Eng.).

C. ATHOL R. GORDON, M.D.
(Man.).

H. MEDOVY, B.A., M.D. (Man.).

Editorial Board of C. M. A. Journal

ROSS B. MITCHELL, B.A., M.D.,
C.M. (Man.), F.R.C.P. (C.).

E. S. MOORHEAD, B.A. (T.C.D.),
M.B., B.Ch. (Dub.), B.A.O.,
F.R.C.P. (C.).

C. W. MacCHARLES, M.D. (Man.).

Representatives to C. M. A. Council

W. S. PETERS, M.D. (Man.).

C. W. MacCHARLES, M.D. (Man.).

F. D. McKENTY, M.D. (Man.),
F.R.C.S. (C.).

G. S. FAHRNI, M.D., Ch.M. (Man.),
F.R.C.S. (C.).

P. H. T. THORLAKSON, M.D., C.M.
(Man.), F.R.C.S. (C.).

M. R. MacCHARLES, M.D., C.M.
(Man.), F.R.C.S. (Edin.),
F.R.C.S. (C.).

T. E. HOLLAND, B.A., M.D. (Man.),
F.R.C.S. (Edin.).

E. S. MOORHEAD, B.A. (T.C.D.),
M.B., B.Ch. (Dub.), B.A.O.,
F.R.C.P. (C.).

Legislative Committee

G. S. FAHRNI, M.D., Ch.M. (Man.),
F.R.C.S. (C.), Chairman.

C. R. RICE, M.D., C.M. (Man.).

S. G. HERBERT, M.D. (Man.).

W. G. CAMPBELL, M.D., C.M.
(McG.), Winnipeg.

Workmen's Compensation Referee Board

W. CHESTNUT, M.D., C.M. (Man.),
Chairman.

Committee on Maternal Mortality
J. D. McQUEEN, M.D., C.M.,
F.R.C.S. (C.), F.A.C.S., Chair-
man.

Editorial Committee

C. W. MacCHARLES, M.D. (Man.),
Convener.

Committee on Historical Medicine and Necrology

ROSS B. MITCHELL, B.A., M.D.
C.M. (Man.), F.R.C.P. (C.),
Convener.

Radio Committee

R. W. RICHARDSON, M.D., Ch.M.
(Man.), Convener.

Auditors

F. G. McGUINNESS, M.D., C.M.
(Man.), F.R.C.S. (C.), M.C.O.G.

H. D. KITCHEN, M.D., C.M.
(Man.).

FRANK W. HORNER LIMITED

HIGH GRADE
PHARMACEUTICALS

MONTREAL - Canada



WINNIPEG OFFICE

203 Canada Building

Telephone 26 141

McCREERY'S

Easter Suggestions
in CLOTHING for Men

Exclusive Fabrics . . .

*Tailored in Custom Manner
Artistically Styled
Dependable Service*

Ready to Wear or
Made to Measure

Also

Hats, Shirts and Furnishings
in the Newest Shades and Styles

McCREERY'S LTD.

293 Portage Ave.

Winnipeg

(One door East of Capitol Theatre).

Medical Library University of Manitoba

Current Medical Literature

"The Practitioner"—April, 1938.

- "Emergencies in Cardiac Disease," by A. Hope Gosling, M.D., F.R.C.P., Physician to Out-Patients, St. Mary's Hospital; Physician to the Cardiac Department, Brompton Hospital.
- "Emergencies in Respiratory Disease," by F. Chandler, M.A., M.D., F.R.C.P., Physician, St. Bartholomew's Hospital; Senior Physician, St. London Chest Hospital.
- "Diagnosis and Treatment of Haematemesis," by L. Livingstone, M.D., F.R.C.P., Physician, King's College Hospital; Assistant Physician, St. Brompton Hospital.
- "The Problem of the Acute Abdomen," by Philip Mitchiner, M.D., M.S., F.R.C.S., Honorary Surgeon to H.M. the King; Surgeon, St. Thomas's Hospital.
- "Medical Emergencies in Kidney Disease," by Arthur Ellis, M.D., F.R.C.P., Director, Medical Unit, St. London Hospital; Professor of Medicine, University of London.
- "Stroke," by Wilfred Harris, M.D., F.R.C.P., Consulting Physician, St. Mary's Hospital; Physician, St. Maida Vale Hospital for Nervous Diseases.
- "Coma," by C. M. Hinds Howell, M.A., D.M., F.R.C.P., Consulting Physician, St. Bartholomew's Hospital; Physician, the National Hospital, Queen's Square, London.
- "Acute Insanity," by T. S. Good, M.A., M.R.C.P., L.R.C.P., Physician for Nervous Diseases, Radcliffe Infirmary, Oxford.
- "Infantile Convulsions," by Richard W. B. Ellis, M.D., M.R.C.P., Assistant Physician for Childref Diseases, Guy's Hospital; Physician, The Infants' Hospital, Vincent Square, London.
- "The Primary Treatment of Facial Injuries," by Harold Gillies, C.B.E., F.R.C.S., Hon. F.A.C.C., Plastic Surgeon, St. Bartholomew's Hospital, St. London County Council, the Royal Air Force, Andrew's Hospital, Dollis Hill, and the North Staffordshire Royal Infirmary, Newcastle-upon-Tyne.
- "The Minor Surgical Emergencies of Industry," by William Blood, M.R.C.S., L.R.C.P., Medical Officer, F. Lyons and Co., Ltd.
- "Midwifery Emergencies," by Donald McIntyre, M.D., F.R.C.S. (Ed.), F.C.O.G., Surgeon, Royal Samaritan Hospital for Women, Glasgow.
- "Gynaecological Emergencies," by Alexander Galletly, M.C., M.B., F.R.C.S., Surgeon, the Chelsea Hospital for Women.
- "Surgical Emergencies in the Genito-Urinary System," by W. D. Doherty, M.Chir., F.R.C.S., Surgeon, Genito-Urinary Department, Guy's Hospital.
- "Some Emergencies in Oto-Rhino-Laryngological Disease," by F. G. Wrigley, M.D., Assistant Auditory Surgeon, Manchester Royal Infirmary.
- "Ophthalmic Emergencies," by G. W. Black, M.D., F.R.C.S., Ophthalmic Surgeon, Surgeon, General Infirmary, Leeds.
- "Diet in Health and Disease: X.—Diet in Nervous and Mental Disorders," by William Sargant, M.D., M.R.C.P., and Russell Fraser, M.B., M.R.C.S. (From the Psychiatric Unit, Maudsley Hospital, London).

"Acute Food Poisoning," by Julius Burnford, M.B., F.R.C.P., D.P.H., Senior Physician, the West London Hospital.

"Artificial Respiration," by G. P. Crowden, D.Sc., M.R.C.P., Reader in Industrial Physiology, University of London, London School of Hygiene and Tropical Medicine.

"Post-Graduate Medical Journal"—April, 1938.

"The Male Climacteric," by Kenneth Walker, M.A., M.B., F.R.C.S., Lecturer in Venereal Disease and Officer in Charge Venereal Department, St. Bartholomew's Hospital; Surgeon in Charge Genito-Urinary Department, Royal Northern Hospital; Surgeon, St. Paul's Hospital for Genito-Urinary Diseases.

OBITUARY

DR. WILLIAM CHESTNUT

Dr. William Chestnut died February 7th of coronary thrombosis at his residence, in his 72nd year. He was born in County Antrim, Ireland, graduated in Arts and had one year's study in Theology from McGee College, Londonderry. Coming to Canada 41 years ago, he completed his theological course in Manitoba College. He took up the study of medicine with the view of entering the foreign mission field and graduated in 1898, receiving the University Silver Medal, the Lt.-Governor's Silver Medal, and the Munro-Proctor Gold Medal. Owing to an eye accident he did not enter the foreign mission field, but began practice in Winnipeg. He was Medical Superintendent of the Winnipeg General Hospital from 1900 to 1903, and then resumed private practice. For a number of years he was on the Honorary Attending Staff of the Winnipeg General Hospital, and was also Assistant Professor of Medicine in the Faculty of Medicine.

DR. WILLIAM HENRY RENNIE

Dr. William Henry Rennie, Portage la Prairie, died suddenly on February 6th, aged 66. Born in Wellington County, Ont., he graduated in medicine from the University of Toronto, and practiced in 1909 at Wardville, near London, Ont. In 1910 he went to Portage la Prairie and has continued in active practice up to the time of his death. He was Officer of Health of the Rural Municipality of Portage la Prairie, a former President of the College of Physicians and Surgeons of Manitoba, and a member of the Executive of the Manitoba Medical Association. He is survived by his widow, one daughter, and three sons, two of whom, Dr. James Rennie and Dr. Jack Rennie, are taking post-graduate work in Edinburgh, Scotland.

FRANK WYETH HORNER

Frank Wyeth Horner, aged 63 years, died on February 9th in Montreal. He was president of Frank W. Horner Limited, manufacturing chemists, Montreal. For some years he was a governor of the Montreal General Hospital.

THE MARGARET SCOTT NURSING MISSION

*Free Home Visiting Nursing
in Greater Winnipeg*

99 George Street

Phone 96 839

LABORATORY POULENC FRERES OF CANADA LIMITED

The home of:

**Novarsenobenzol Billon
STOVAR SOL
GARDENAL
SONERYL**

Head Office:

**204 Youville Square
MONTREAL**

PHYSIOTHERAPY

by J. C. Swann

Member of

THE CANADIAN PHYSIOTHERAPY ASSOCIATION
(Incorporated by Dominion Charter)

Graduate of: Massage, Swedish Movements, Muscle Re-education and Medical Gymnast, 2 years training in Christie Street Hospital, Toronto, Masseur at Deer Lodge Hospital, Pensions and Health, Winnipeg, for the past 15 years.

(Under Medical Supervision or Direction).

Phone 80 760 438 Somerset Bldg. Res. Phone
after 1 p.m. Winnipeg, Man. 54 195

**Its food value is greater
than many "Food Products."**

**DREWRY'S DRY
GINGER ALE**

3 Sizes: 6-oz. — 12-oz. — 28-oz.

Manitoba Nurses' Central Directory

214 Balmoral St.

Phone 72 151

24 HOUR SERVICE

REGISTERED NURSES

NURSING ATTENDANTS

Schedule of rates and hours on request.

P. BROWNELL, Reg. N.
Registrar.

The New Synthetic Antispasmodic . . .

TRASENTIN "CIBA"

(Diphenylacetyldiethylaminoethanolester-hydrochloride)

SUPPRESSES SPASMS OF THE GASTRO-INTESTINAL TRACT, GENITO-URINARY SYSTEM AND OTHER SMOOTH MUSCLE ORGANS.

Tablets —bottles of	Ampoules —boxes of
20 and 100.	5 and 20.

1 tablet or 1 ampoule contains 0.075 gm.
of the active substance.
CIBA COMPANY LIMITED, Montreal

COLLECTIONS

The MEDICAL BUSINESS BUREAU can render you an experienced collection service—with 14 years'—services to the Medical and Dental profession.

We have every facility for an efficient collection service—

- Investigations on character and financial worth;
- Personal contact with debtors;
- Follow-ups;
- Complete legal facilities;
- Bonded agents throughout Canada;
- Regular monthly returns.

Doctor, you require a tactful and dignified service that will not jeopardize your position with the patient. Write or telephone—

THE MEDICAL BUSINESS BUREAU

101 MEDICAL ARTS BUILDING

WINNIPEG, MAN.

Telephone 23 534

The Winnipeg Drug Co., Limited

H. D. CAMPBELL

PRESCRIPTION SPECIALISTS

Agents for
NICHOLSON'S VACCINES407 PORTAGE AVE. (Cor. Kennedy)
Phone 21 621

Civil Service of Canada

BACTERIOLOGIST WANTED

The Civil Service Commission announces of competitive examination for the following position

Comp. No. 28592. An Assistant Bacteriologist Male, in the Laboratory of Hygiene, Health Branch, Department of Pensions and National Health, Kelowna, B.C., at an initial salary of \$2,040 per annum. While a temporary appointment only may be made present, this examination will qualify for permanent appointment. In the event of permanent appointment the initial salary of \$2,040 may be increased upon recommendation for meritorious service and increase in usefulness at the rate of \$120 per annum until a maximum of \$2,520 has been reached.

Preference will be given to qualified candidates who have resided in the Province of British Columbia for a period of at least one year immediately preceding the closing date for the receipt of applications.

Duties.—Under supervision to undertake bacteriological investigation of certain pathogenic microorganisms; to perform various serological procedures to assist in research and in the routine work of the laboratory.

Qualifications required.—Graduation in medicine in science with major specialization in bacteriology from a university of recognized standing; at least one year of post-graduate experience in pathogenic bacteriology; credit will be given for any additional bacteriological experience; demonstrated ability to conduct independent investigations; supervisory ability; good address. While no definite age limit has been fixed, age may be a determining factor in making a selection.

Nature of examination.—A rating on education and experience will be given from the sworn statements, supporting documents and other evidence submitted by applicants. Candidates must give full particulars regarding their technical training and experience, especially as they bear on the qualifications for the duties of this position. An oral examination may be given if necessary in the opinion of the Commission. No examination fee is required.

An eligible list valid for a period of one year will be established.

NICOTINIC ACID B.D.H.

The recent differentiation of "Vitamin B2" into three factors (lactoflavine, "pellagra-preventing factor" and B6, the rat-dermatitis factor), followed the investigation on the administration of nicotinic acid to pellagrins (Journ. Amer. Chem. Soc., 1937, 59, 1767 and Nature, 1937, December 18th, p. 107). Confirmation of this discovery is afforded by more recent reports (Journ. Amer. Med. Assoc., December 18th, 1937, p. 2054 and Lancet, January 29th, 1938, p. 252) and it has been shown that nicotinic acid is a precursor of the "pellagra-preventing" factor which is elaborated after the ingestion of this substance.

Nicotinic Acid B.D.H., for the treatment of pellagra symptoms, is available in tablets each containing 30 mg. of the pure substance, and prices may be obtained from The British Drug Houses (Canada) Limited, Terminal Warehouse, Toronto.